

## Natter's Notes

# Fertilizing Seasonal Vegetables and Flowers

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When it comes to fertilizing plants, common myths may risk your plants' health. The general guideline is to start early and supplement as the season proceeds. So, let's look at the facts, while focusing on growing annual flowers and vegetables.

### Synthetic or organic?

It's important to know that many brands and forms of fertilizer work well. Whatever your choice, organic or synthetic, liquid or solid, the goal is to produce abundant yields of flowers and/or edibles. It's also possible to use a combination of organic and synthetic. For instance, you might plant a cover crop, then follow with synthetic fertilizers at the appropriate times. (See *Cover Crops for Home Gardens*; FS 304; <https://catalog.extension.oregonstate.edu/sites/catalog/files/project/pdf/fs304.pdf>.)

In order to obtain the same end result, synthetic products are less costly than organics, are applied in small amounts, and act rapidly. Organics cost more, in part, because they require larger amounts as well as considerable labor to haul and apply. Then, too, organics react relatively slowly because they rely on soil organisms to release the fertilizer elements. Perhaps the greatest value of the bulky organics (manure), is that a small percentage of fertilizer elements remains to be released during subsequent years. Thus, avoid overloading the soil by applying the full amount of manure for 1 to 3 years, then apply a smaller amount during successive years. (See EC 1503, page 7.)

### Soil tests

A professional soil test is useful before beginning a new garden to identify possible excesses and deficiencies in the soil. Then, when repeated every several years, the test will note changes and suggest adjustments in fertilizer applications. Fall is a good time for a test because lime and possibly other remedies can be applied in a timely manner.

Here, in the metro counties, we typically suggest the nearby A&L Soil Lab, 503-968-9225. Call them to ask how to sample and how to deliver the soil. Request a general test, with recommendations, for a home garden in which you will grow annual vegetables, or whatever else you are interested in, perhaps lawn.

### Fertilizing seasonal plants in the garden versus in pots

When it comes to fertilizer deficiencies in our region with its clay-based soils, the most common in home gardens is nitrogen. (Nitrogen deficiency is revealed in pale and/or stunted growth; oldest leaves turn yellow, then dry and may drop; new tip growth is dark green.) So, for the most part, you can forget about using any of those various fancy deficiency charts when growing seasonal plants in the garden. In most instances, a general fertilizer with nitrogen (N), phosphorus (P), and potassium (K) will do the job for seasonal flowers or vegetables, presuming, of course, that the plants receive appropriate amounts of light and water for their kind.

Growing in containers is where things may become complicated. Fill them with a commercially-prepared potting mix because the coarse components will allow good drainage in the shallow depth available in most pots as long as it has drain holes. (Avoid adding coarse stuff in the bottom because, contrary to popular opinion, it impedes drainage.) Find a potting mix that works for you and your watering habits, then always use the same stuff in your containers.

It's worth knowing that commercial potting mixes enriched with a bit of fertilizer will need additional fertilizer if your seasonal plants are expected to achieve the expected abundant yields. Always use a general purpose product designed for container-grown plants.

Wherever a seasonal plant is growing, in the ground or a pot, don't bother adding a high phosphorus fertilizer to encourage bloom. A plant absorbs what it needs when it needs it. More important yet, adequate phosphorus must be available in the first quarter of the plant's life.

### **Starting seasonal flowers and vegetables from seed**

If you seed directly into the garden, begin by digging to the depth of a garden fork, remove weeds and debris, mix in several inches of compost, then level the soil. Next, rake in a starter dose of granular fertilizer, then seed and, finally, settle the soil by gently watering.

As soon as the cotyledons (seedling leaves) change position from vertical to horizontal, apply a liquid fertilizer at quarter strength.

Follow up with a side-dressing at about 4 weeks. (Or follow the package directions!)

Similarly, when seeding into a container, fill it with slightly moist potting mix, seed, then water lightly to settle the seed and potting mix. When the cotyledons become horizontal, apply a liquid fertilizer at quarter strength.

Set your transplants, either home-grown or purchased, into their final growing place when they are several inches tall, then water with quarter-strength fertilizer to settle the soil. It won't be long until you can start harvesting.

### **Useful Resources**

- *Growing Your Own* (EM9027) provides a rapid overview especially useful for gardeners, including those new to our region. Particularly helpful is the chart of planting dates for vegetables. (We're in Region 2.) <https://catalog.extension.oregonstate.edu/sites/catalog/files/project/pdf/em9027.pdf>
- *Soils and Fertilizers* (chapter 2 in Sustainable Gardening, the MG handbook)
- *A Guide to Collecting Soil Samples for Farms and Gardens* <https://catalog.extension.oregonstate.edu/sites/catalog/files/project/pdf/ec628.pdf>
- *Fertilizing Your Garden* (PNW 1503) includes the use of wood ashes. <https://catalog.extension.oregonstate.edu/sites/catalog/files/project/pdf/ec1503.pdf>
- *Fertilizing with Biosolids* (PNW 508) [https://catalog.extension.oregonstate.edu/sites/catalog/files/project/pdf/pnw508\\_0.pdf](https://catalog.extension.oregonstate.edu/sites/catalog/files/project/pdf/pnw508_0.pdf)

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